

Elevator Inspector, Step 1

New Hires are placed at step one until they meet the minimum requirements and qualifications to move to step two.

To move to Elevator Inspector pay step two, an inspector at step one must obtain the following inspection credentials as mandated by the State of Wisconsin:

- 1. State of Wisconsin Elevator Inspector License**
- 2. Qualified Elevator Inspector (QEI) – 1 Certification**

An inspector holding these credentials upon entering the City of Milwaukee Elevator Inspection section, with supervisor and DNS administrative approval, may be eligible for appointment to a higher career ladder step (based on certifications held at the time of appointment) with the one year probationary period waived for the sole purposes of this Career Ladder. Separate probationary period requirements mandated by the Department of Employee Relations still apply.

For advancement to each of the higher pay steps in the Elevator Career Ladder, the inspector shall obtain the required Qualitative and Quantitative measures associated with the step they are requesting. The quantitative core competencies must be achieved in the sequential order as outlined in Quantitative Core Competencies document. The inspector's performance, customer service, job skill and knowledge is subject to review by the Supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

Additionally, an inspector must demonstrate a thorough knowledge pertaining to the fundamentals of performing basic elevator inspections as they relate to good communication, elevator methodologies, code knowledge, problem solving and code interpretation and its enforcement. Listed below is a representation of the core competencies that an inspector must have a thorough knowledge of:

- **General Competencies**
 - Customer Communication Skills
 - Management and Control of Assigned Construction District
 - Familiarity of Necessary Zoning
 - Ability to coordinate with other DNS and City Entities
 - Ability to Evaluate and Interpret Construction Plans
 - Thorough knowledge of the Milwaukee Code of Ordinances
 - Code Administration and Definitions of Commercial and 1&2 Family Construction Codes
 - Familiarity of DNS processes and skill set with regards to computer programs.
- **Elevator Code Competencies Application of Parts**
 - Purpose Exceptions
 - Definitions
 - Alternate level

- Auxiliary power lowering device
- Traveling cable
- Compensation means
- Electric Elevators
- Fire-Resistive Construction
- Strength of Floor
- Design and Construction of pits
- Stop Switch in pits
- Hydraulic Elevators
- Bottom Runby
- Jack-Supporting Structure
- Capacity and Data Plates
- Working Pressures
- Emergency Stop Switches in Cars
- Escalators and Moving Walks
- Angle of Inclination
- Skirt Panels
- Splicing
- Combplates
- Reversal Stop Device
- Dumbwaiters and Material Lifts
- Hoistway Access Doors
- Suspension Means
- Rail Lubricants
- Rope Data
- Belt Drive Machines

*Additionally, an inspector must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES.***

Additional Steps

After attainment of job required certifications and licensure as required in the job description along with supervisor and DER approval the inspector may begin advancing in the career ladder. The below listed steps may be achieved in any order.

In order to advance to pay step 2 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for one of the below listed Qualitative Steps.

In order to advance to pay step 3 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for two of the below listed Qualitative Steps.

In order to advance to pay step 4 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for three of the below listed Qualitative Steps.

In order to advance to pay step 5 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for four of the below listed Qualitative Steps.

In order to advance to pay step 6 using Step options 2-6, the inspector must have achieved the Step 1 requirements and be able to provide evidence of completion for five of the below listed Qualitative Steps.

In each case above, for advancement to a higher pay step, the inspector shall obtain the required Qualitative and Quantitative measures associated with the step they are requesting. The quantitative core competencies must be achieved in the sequential order as outlined in the Quantitative Core Competencies document. In addition, inspector's performance, customer service, job skill and knowledge is subject to review by the supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

Elevator Inspector, Step Option 2

To advance using Step Option 2, an inspector shall possess the job required certification/licensure as outline in step one. Step option two requires the inspector to complete the following:

- 1. Knowledge and testing of new products from different elevator companies and tested and witnessed by the State of Wisconsin or knowledge of new and revised codes and their applications, tested and witnessed by the state or equivalent as approved by the Commissioner of Neighborhood Services.**
- 2. Receive a letter of recommendation from a supervisor stating that the inspector is ready for advancement to the next step. If a supervisor(s) does not recommend promotion the supervisor(s) shall provide the inspector with a written list of improvements/actions needed prior to recommendation.**

An inspector using step option two must demonstrate a thorough knowledge of new and updated elevator technology and codes. An inspector must demonstrate good customer service skills and may be called upon to help mentor less experienced inspectors. The inspector's performance, customer service, job skill and knowledge is subject to review by the Supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

*Additionally, an inspector advancing using this step option must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.*

Elevator Inspector, Step Option 3

To advance using Step Option 3, an inspector shall possess the job required certification/licensure as outline in step one. Step option three requires the inspector must successfully complete the following:

- 1. Pass a Milwaukee Code of Ordinances open code exam**
- 2. Receive a letter of recommendation from a supervisor stating that the inspector is ready for advancement to the next step. If a supervisor(s) does not recommend promotion the supervisor(s) shall provide the inspector with a written list of improvements/actions needed prior to recommendation.**

An inspector using step option three must demonstrate good customer service skills and may be called upon to mentor less experienced inspectors. The inspector's performance, customer service, job skill and knowledge is subject to review by the Supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

*Additionally, an inspector advancing using step option three must meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.*

Elevator Inspector, Step Option 4

To advance using Elevator Inspector Step Option 4, an inspector must successfully complete the following:

- 1. Pass a computer proficiency tests on the use of LMS-Basic and Advanced***
- 2. Receive a letter of recommendation from a supervisor stating that the inspector is ready for advancement to the next step. If a supervisor(s) does not recommend promotion the supervisor(s) shall provide the inspector with a written list of improvements/actions needed prior to recommendation.***

An inspector using step option four must demonstrate innate public communication skills and actively participate mentoring less experienced inspectors. An inspector achieving step four or higher will possess both core competencies as well as specialized competencies in a wide variety of construction regulations. The inspector's performance, customer service, job skill and knowledge is subject to review by the Supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training, specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

*Additionally, an inspector advancing from using step option four must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.*

Elevator Inspector, Step Option 5

To advance using Elevator Inspector Step Option 5, an inspector must successfully complete the following:

- 1. Pass a Milwaukee Public Library offered Computer Course titled "Email Basics", or an equivalent course***
- 2. Pass a Milwaukee Public Library offered Computer Course titled "Intro to Word", or an equivalent course***
- 3. Pass a Milwaukee Public Library offered Computer Course titled "Intro to Excel", or an equivalent course***
- 4. Receive a letter of recommendation from a supervisor stating that the inspector is ready for advancement to the next step. If a supervisor(s) does not recommend promotion the supervisor(s) shall provide the inspector with a written list of improvements/actions needed prior to recommendation.***

An inspector using step option five expands their administrative knowledge and computer skills to assist in the administrative tasks and record keeping. An inspector must demonstrate innate public communication skills and actively participate mentoring less experienced inspectors. An inspector will possess both core competencies as well as specialized competencies in a wide variety of elevator regulations.

The inspector's performance, customer service, job skill and knowledge is subject to review by the Supervisor for applicability for the step being requested and the time frame to be analyzed taking into consideration training,

specialty projects, inspector workload, district composition, and other factors that may have an impact on performance.

Additionally, an inspector advancing from step option five must meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.

Elevator Inspector, Step Option 6

To advance using Elevator Inspector Step Option 6, an inspector must successfully complete one the following inspection credentials issued by the International Code Council (ICC), **NFPA or NICET**, or through other means described below:

1. **ICC – Fire Inspector 1**
OR
2. **NFPA Certified Fire Inspector 1**
OR
3. **NICET Level 1 Certification – Fire Alarm Systems Certification**
OR
4. **Have obtained an associate's degree in engineering, architecture, construction management, construction technology or a field closely related to construction.**
OR
5. **Have successfully completed 60 college credits of which a minimum of 39 credits are job-related or engineering-related, architectural design-related or construction management related.**
OR
6. **Have obtained a Bachelor's degree in engineering, architecture, architectural engineering, construction management, construction technology, mechanical engineering, or a field closely related to construction.**
OR
7. **Have obtained licensure through the State of Wisconsin as a Registered Architect or Professional Engineer.**
And
8. **Receive a letter of recommendation from a supervisor stating that the inspector is ready for advancement to the next step. If a supervisor(s) does not recommend promotion the supervisor(s) shall provide the inspector with a written list of improvements/actions needed prior to recommendation.**

ICC - Fire Inspector 1 - Core Competencies

General Inspection Administration

- Communication
- Inquiry Response
- Inspection Reports
- Research
- Identification of Permitting
- Issuance of Permits
- Plan Review
- Recordkeeping
- Complaints
- Appeals Correspondence
- Legal Proceedings

General Provisions For Fire Safety

- *Means of Egress*
- *Types of Construction*
- *Equipment and System Readiness*
- *Emergency Access*
- *Fire Flow Test and Data*
- *Emergency Planning - Applicability*
- *Emergency Planning – Evaluation*
- *Fire Protection Plan*
- *Inspection for Construction Type*
- *Hazardous Conditions*

Occupancies

- *Occupancy Classification*
- *Number of Occupants*
- *Inspection For Occupancy Group*

Regulated Materials and Processes

- *Industrial/Commercial*
- *Storage and Handling*
- *Interior Finishes*
- *Fire Growth*

NFPA - Certified Fire Inspector 1 - Core Competencies

- This duty involves the preparation of correspondence and inspection reports, handling of complaints, and maintenance of records, as well as participation in legal proceedings and maintenance of an open dialogue with the plan examiner and emergency response personnel, according to the following job performance requirements.
- Compute the allowable occupant load of a single-use occupancy or portion thereof, given a detailed description of the occupancy, so that the calculated allowable occupant load is established in accordance with applicable codes and standards.
- Occupancy classification; applicable codes, regulations, and standards adopted by the jurisdiction; operational features; fire hazards presented by various occupancies; and occupant load factors.
- The ability to calculate occupant loads, identify occupancy factors related to various occupancy classifications, use measuring tools, and make field sketches.
- Inspect means of egress elements, given observations made during a field inspection of an existing building, so that means of egress elements are maintained in compliance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Applicable codes and standards adopted by the jurisdiction related to means of egress elements, maintenance requirements of egress elements, types of construction, occupancy egress requirements, and the relationship of fixed fire protection systems to egress requirements and to approved means of egress elements, including, but not limited to, doors, hardware, and lights.
- The ability to observe and recognize problems, calculate, make basic decisions related to means of egress, use measuring tools, and make field sketches.
- Verify the type of construction for an addition or remodeling project, given field observations or a description of the project and the materials being used, so that the construction type is identified and recorded in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Applicable codes and standards adopted by the jurisdiction, types of construction, rated construction components, and accepted building construction methods and materials.

- Determine the operational readiness of existing fixed fire suppression systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- A basic understanding of the components and operation of fixed fire suppression systems and applicable codes and standards.
- Determine the operational readiness of existing fire detection and alarm systems, given test documentation and field observations, so that the systems are in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- A basic understanding of the components and operation of fire detection and alarm systems and devices and applicable codes and standards.
- Determine the operational readiness of existing portable fire extinguishers, given field observations and test documentation, so that the equipment is in an operational state, maintenance is documented, and deficiencies are identified, documented, and reported in accordance with the policies of the jurisdiction.
- A basic understanding of portable fire extinguishers, including their components and placement, and applicable codes and standards.
- Recognize hazardous conditions involving equipment, processes, and operations, given field observations, so that the equipment, processes, or operations are conducted and maintained in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Practices and techniques of code compliance inspections, fire behavior, fire prevention practices, ignition sources, safe housekeeping practices, and classification of hazardous materials.
- Compare an approved plan to an existing fire protection system, given approved plans and field observations, so that any modifications to the system are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Fire protection symbols and terminology.
- The ability to read and comprehend plans for fire protection systems, observe, communicate, apply codes and standards, recognize problems, and make decisions.
- Verify that emergency planning and preparedness measures are in place and have been practiced, given field observations, copies of emergency plans, and records of exercises, so that plans are prepared and exercises have been performed in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Requirements relative to emergency evacuation drills that are required within the jurisdiction, ways to conduct and/or evaluate fire drills in various occupancies, and human behavior during fires and other emergencies.
- The ability to identify the emergency evacuation requirements contained in the applicable codes and standards and interpret plans and reports.
- Inspect emergency access for an existing site, given field observations, so that the required access for emergency responders is maintained and deficiencies are identified, documented, and corrected in accordance with the applicable codes, standards, and policies of the jurisdiction.
- Applicable codes and standards, the policies of the jurisdiction, and emergency access and accessibility requirements.
- The ability to identify the emergency access requirements contained in the applicable codes and standards, observe, make decisions, and use measuring tools.
- Verify code compliance for incidental storage, handling, and use of flammable and combustible liquids and gases, given field observations and inspection guidelines from the AHJ, so that applicable codes and standards are addressed and deficiencies are identified, documented, in accordance with the applicable codes and standards and the policies of the jurisdiction.

- Classification, properties, labeling, storage, handling, and use of incidental amounts of flammable and combustible liquids and gases.
- Verify code compliance for incidental storage, handling, and use of hazardous materials, given field observations, so that applicable codes and standards for each hazardous material encountered are addressed and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Classification, properties, labeling, transportation, storage, handling, and use of hazardous materials.
- Recognize a hazardous fire growth potential in a building or space, given field observations, so that the hazardous conditions are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Basic fire behavior; flame spread and smoke development ratings of contents, interior finishes, building construction elements, decorations, decorative materials, and furnishings; and safe housekeeping practices.
- Determine code compliance, given the codes, standards, and policies of the jurisdiction and a fire protection issue, so that the applicable codes, standards, and policies are identified and compliance is determined.
- Basic fire behavior; flame spread and smoke development ratings of contents, interior finishes, building construction elements, life safety systems, decorations, decorative materials, and furnishings; and safe housekeeping practices.
- Verify fire flows for a site, given fire flow test results and water supply data, so that required fire flows are in accordance with applicable codes and standards and deficiencies are identified, documented, and reported in accordance with the applicable codes and standards and the policies of the jurisdiction.
- Types of water distribution systems and other water sources in the local community, water distribution system testing, characteristics of public and private water supply systems, and flow testing procedures.
- The ability to use Pitot tubes, gauges, and other data gathering devices as well as calculate and graph fire flow results.

NICET Level 1 – Fire Alarm Systems Certification

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| <ul style="list-style-type: none">• Representation of system components, cabling, and dimensions on system drawings• Terminology related to basic components and installation operations• Roles of codes and standards in fire alarm systems work• Scopes of the IBC, IFC, and IRC• Scopes of NFPA 1 and 101 codes• Scopes of NFPA 70 and 72 standards• Types of fire alarm systems and associated devices• Tools required for mounting and connecting fire alarm system components, and their operation• Materials required for mounting cables and devices• Functions performed in a fire alarm system by manual fire alarm boxes, automatic fire detection devices, audible signaling appliances, visible signaling appliances, and annunciators; and how they are operated | <ul style="list-style-type: none">• Representation of system components, cabling, and dimensions on system drawings• Tools required for mounting cables, wires, conduit, and fixtures, and their operation• Types of outlet and junction boxes and their Applications• Types of wire and cable, and their applications• Types of conduit and their applications• Materials required for mounting cables• OSHA Publications• American Red Cross First Aid and Safety Handbook• Potential hazards associated with hand and power tools• Potential hazards associated with electrical cables and equipment• Materials that require special handling and/or disposal methods• Potential hazards associated with lifts, ladders, and other equipment |
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Department Of Neighborhood Services
Construction Inspection Qualitative Core Competencies - 2017

- Purpose and operation of basic test equipment
- NFPA 72 test and inspection form

*An inspector using step option six must demonstrate a thorough knowledge of **and ability to perform complex elevator and conveyance system inspections**. In addition, it is necessary for the inspector to be familiar with the fire life safety components of commercial and residential facilities. These credential requirements are intended to be comprehensive and fully develop an inspectors understanding of the intricate nature of the systems they will be inspecting. An inspector must demonstrate innate public communication skills and actively participate mentoring less experienced inspectors. An inspector achieving step four or higher will possess both core competencies as well as specialized competencies in a wide variety of construction regulations.*

*Additionally, an inspector advancing using step option six must also meet or exceed the thresholds for advancement established in the **QUANTITATIVE CORE COMPETENCIES**.*